Metcalf Energy Center, LLC

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1 Blanchard Road Coyote, CA 95013

January 9, 2017

BAY ALTH AIR QUALITY MARACEMENT DISTRICT

Director of Compliance and Enforcement Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105-2097 Attn: Title V Reports

Re:

Metcalf Energy Center #B2183

Title V CEMS Semi-Annual Monitoring Report Reporting Period: July 1 – December 31, 2016

To Whom It May Concern:

Enclosed is the Title V CEMS Semi-Annual Monitoring Report for the Metcalf Energy Center ("MEC") for the reporting period from July 1 – December 31, 2016.

MEC is currently in compliance with the District CEMS regulations. MEC maintained compliance with the monitoring requirements listed in the Title V permit for MEC during this reporting period.

By signing this report I am certifying that based on information and belief formed after reasonable inquiry, the statements and information in the attached report are true, accurate, and complete.

If you have any questions or require additional information, do not hesitate to contact Rosemary Silva, EHS Specialist, at (408) 361-4954.

Sincerely,

Terry Mahoney

General Manager and

Designated Representative/Responsible Official

Metcalf Energy Center, LLC.

Enclosures: Title V Semi-Annual Report

cc:

Barbara McBride

Calpine Corp

David Williams

Calpine Corp
Calpine Corp

Katherine Piper Region 9

EPA

Table VII - A Applicable Limits and Compliance Monitoring Requirements S-1, GAS TURBINE #1

S-2, GAS TURBINE #2

				Monitoring	Monitoring		Comp	Compliance Yes No X X X X X X X
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Түре		
NOx	BAAQMD	N	125 ppm	BAAQMD	С	CEM	¥	
	9-3-303			1-520.1				
NOx	BAAQMD	N	9 ppmv @ 15% O2, dry	BAAQMD	С	CEM		
	9-9-			9-9-501			х	
	301.1.3							
NOx	SIP	Υ	9 ppmv @ 15% O2, dry	SIP 9-9-501	С	CEM	v	
	9-9-301.3						Х	
NOx	BAAQMD	N	0.15 LB/MMBTU or 5 ppmv	BAAQMD 9-9-	С	CEM		
	9-9-301.2			501	i		Х	
NOx	NSPS, 40	Υ	75 ppmv @ 15% O2, dry, 4-	NSPS 40 CFR	С	CEM		
	CFR		hour rolling average	60.334(c.)				
	60.332						Х	
	(a)(1)							
		Υ	None	40 CFR 75.10	С	CEM	х	
NOx	BAAQMD	Υ	19.2 lb/hr for each	BAAQMD	С	CEM		1
	condition		turbine/HRSG powertrain,	condition				
	#18310,		except during turbine	#18310, Part		Ì	X	
	part 20a		startup and shutdown	27b				
NOx	BAAQMD	Υ	19.2 lb/hr for each	BAAQMD	P/A	Source Test at		
	condition		turbine/HRSG powertrain,	condition		maximum load		
	#18310,		except during turbine	#18310, Part			х	
	part 20a		startup and shutdown	31				\
NOx	BAAQMD	Υ	0.00904 lb/MM BTU for	BAAQMD	С	CEM		
	condition		each turbine/HRSG	condition				
	#18310,		powertrain, except during	#18310, Part			x	
	part 20a		turbine startup and	27b				
			shutdown					
NOx	BAAQMD	Υ	0.00904 lb/MM BTU for	BAAQMD	P/A	Source Test at		
	condition		each turbine/HRSG	condition		maximum load		1
	#18310,		powertrain, except during	#18310, Part			x	
	part 20a		turbine startup and	31]		
			shutdown					

				Monitoring	Monitoring		Comp	No
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Туре		
NOx	BAAQMD	Y	2.5 ppmv, @ 15% O2, dry,	BAAQMD	P/A	Source Test at		:
	condition		for each tubine/HRSG	condition		maximum load		
	#18310,		powertrain, 1-hr average	#18310, Part			X	
	part 20b	,	except during turbine	31				ļ
			startup and shutdown					
NOx	BAAQMD	Υ	2.5 ppmv, @ 15% O2, dry,	BAAQMD	С	CEM		
	condition		for each tubine/HRSG	condition				
	#18310,		powertrain, 1-hr average	#18310, Part			X	
	part 20b		except during turbine	27b ·				
			startup and shutdown					
NOx	BAAQMD	Y	240 lb/gas turbine start-up	BAAQMD	С	CEM		
	condition			condition			x	
	#18310,			#18310, Part	į		^	
	part 21			27b				
NOx	BAAQMD	Υ	480 lb/hr during gas turbine	BAAQMD	С	CEM		
	condition		cold start-up or combustor	condition			v	
	#18310,		tuning period	#18310, Part			X	
	part 21			27b				<u> </u>
NOx	BAAQMD	Υ	80 lb/gas turbine shutdown	BAAQMD	С	CEM		
	condition			condition			v	
	#18310,			#18310, Part			X	
	part 21			27b				
NOx	BAAQMD	Υ	1362.6 lb/day for S-1, S-3	BAAQMD	С	CEM		
	condition		Gas Turbines and S-2, S-4	condition			v	
	#18310,		HRSGs, combined	#18310, Part			X	
	part 24a			27b				
NOx	BAAQMD	Υ	123.4 ton/yr for S-1, S-3	BAAQMD	С	CEM		
	condition		Gas Turbines and S-2, S-4	condition				
	#18310,		HRSGs, combined	#18310, Part			X	
	part 25a		(including emissions from	27b				
			commissioning period)					
со	BAAQMD	Υ	18.7 lb/hr, for each	BAAQMD	P/A	Source Test at		
	condition		turbine/HRSG powertrain,	condition		maximum load	v	
	#18310,		except during turbine	#18310, Part		and minimum	X	
	part 20c		startup and shutdown	31		load		
со	BAAQMD	Υ	18.7 lb/hr, for each	BAAQMD	С	CEM		
	condition		turbine/HRSG powertrain,	condition				
	#18310,		except during turbine	#18310, Part]	X	
	part 20c	[startup and shutdown	27b		}		[

				Monitoring	Monitoring		Comp	liance
Type of Limit	Citation of Limit	FE Y/N	Limit	Requirement Citation	Frequency (P/C/N)	Monitoring	Yes	No
CO	BAAQMD	Y Y	0.0088 lb/MM BTU for each	BAAQMD	P/A	Type Source Test at		
CO	condition	'	turbine/HRSG powertrain,	condition	F/A	maximum load		
	#18310,		except during turbine	#18310, Part		and minimum	X	
	part 20d		startup and shutdown	31		load		
со	BAAQMD		0.0088 lb/MM BTU for each	BAAQMD	С	CEM	 -	
CO	condition	'	turbine/HRSG powertrain,	condition	·	CEIVI		
	Į.		l ' ' '	1			X	
	#18310,		except during turbine	#18310, Part				
	part 20d		startup and shutdown	27b	5/4	6	<u>. </u>	
со	BAAQMD	Y	4 ppmv @ 15% O2, dry, for	BAAQMD	P/A	Source Test at		
	condition		each turbine/HRSG	condition		maximum load		
	#18310,		powertrain, 3-hr average,	#18310, Part	1	and minimum	X	ļ
	part 20d		except during turbine	31		load		
			startup and shutdown					<u> </u>
со	BAAQMD	Y	4 ppmv @ 15% O2, dry, for	BAAQMD	С	CEM		ŀ
	condition		each turbine/HRSG	condition				
	#18310,		powertrain, 3-hr average,	#18310, Part			X	
	part 20d		except during turbine	27b				
	<u> </u>		startup and shutdown					
co	BAAQMD	Υ	4 ppmv @ 15% O2, dry, for	40 CFR 64.3	At least 4	CEM		
	condition		each turbine/HRSG	(b)(4)(ii)	times per			
	#18310,		powertrain, 3-hr average,		hour		X	
	part 20d		except during turbine		(CAM Plan)			ļ
			startup and shutdown					
CO -	BAAQMD	Υ	2,514 lb/gas turbine startup	BAAQMD	С	CEM		
	condition			condition				
	#18310,			#18310, Part			X	
	part 21			27b				
со	BAAQMD	γ	5028 lb/hr during gas	BAAQMD	С	CEM		
	condition		turbine cold start-up or	condition				
	#18310,		combustor tuning period	#18310, Part			X	
	part 21			27b				
со	BAAQMD	Υ	902 lb/gas turbine	BAAQMD	С	CEM		
	condition		shutdown	condition				[
	#18310,			#18310, Part			X	
	part 21			27b				
СО	BAAQMD	Υ	7,891.1 lb/day for S-1, S-3	BAAQMD	С	CEM		
. .	condition		gas turbines and S-2, S-4	condition		-5		
	#18310,	1	HRSGs, combined	#18310, Part			X	
	part 24b	1		27b				

				Monitoring	Monitoring		Comp	Yes No X X X X
Type of Limit	Citation of Limit	FE Y/N	Limit	Requirement Citation	Frequency (P/C/N)	Monitoring Type	Yes	No
СО	BAAQMD	Y	588 ton/yr for S-1, S-3 gas	BAAQMD	C	CEM		
	condition		turbines and S-2, S-4	condition		1		
	#18310,		HRSGs, combined (includes	#18310, Part		1	x	
	part 25b		emissions from	27b				
			commissioning period)					
CO ₂		Y	None	40 CFR 75.10	С	fuel flow		
	l l					monitor and	v	
						CO2	^	
		ļ				calculation		
SO ₂	BAAQMD	Y	GLC ¹ of 0.5 ppm for 3 min		N			
	9-1-301		or 0.25 ppm for 60 min or				X	
			0.05 ppm for 24 hours					
SO ₂	BAAQMD	Y	300 ppm (dry)		N	1	v	
	9-1-302						^	
SO₂	NSPS	Υ	0.015% (vol.)	NSPS 40 CFR	N			
	40 CFR		@ 15% O₂ (dry)	60.334(h)		1	X	
	60.333(a)							
SO ₂	NSPS	Υ	Total sulfur content of fuel	NSPS 40 CFR	P/M	Fuel sulfur		
	40 CFR		not to exceed 0.8 percent	60.334(h)(3)(i	:	content testing		
	60.333(b)		by weight (8000 ppmw)	i) and		[
				BAAQMD			x	
	ļ			condition				
				#18310, Part				
				45				
SO ₂		Y	None	40 CFR 75.11,	P/A	Fuel		
				40 CFR 75,		measurements	v	
	:			Appendix D,		, calculations	X	
				part 2.3				
SO2	BAAQMD	Y	1.28 lb/hr, for each	BAAQMD	P/A	Source test at		
	condition		turbine/HRSH powertrain	condition		maximum load	×	
	#18310,			#18310, part			^	
	part 20g			31				
SO2	BAAQMD	Y	1.28 lb/hr, for each	BAAQMD	P/D	Records,		
	condition		turbine/HRSH powertrain	condition		calculations	x	
	#18310,			#18310, part			^	
	part 20g			28				
SO2	BAAQMD	Y	0.0006lb/MM BTU, for	BAAQMD	P/A	Source test at		
	condition		each turbine/HRSG	condition		maximum load	v	
	#18310,		powertrain	#18310, part			×	
	part 20g			31				

				Monitoring	Monitoring		Comp	liance
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Туре		
SO2	BAAQMD	Υ	0.0006lb/MM BTU, for	BAAQMD	P/D	Records,		
	condition		each turbine/HRSG	condition		calculations	x	
	#18310,		powertrain	#18310, part				
	part 20g			28				
SO2	BAAQMD	Y	57.9 lb/day for each	BAAQMD	P/D	Records,		
	condition		turbine/HRSG powertrain	condition	 	calculations	x	
	#18310,			#18310, part				
	part 24e			28	_			
SO2	BAAQMD	Y	10.6 ton /yr for each	BAAQMD	P/D	Records,		
	condition		turbine/HRSG powertrain	condition		calculations	x	:
	#18310,		(includes emissions from	#18310, part		:		
	part 25e		commissioning period)	28				
Opacity	BAAQMD	N	> Ringelmann No. 1 for no		N			
	6-1-301		more than 3 minutes in any				Х	
			hour					
Opacity	SIP 6-301	Υ	> Ringelmann No. 1 for no		N			
			more than 3 minutes in any				X	
			hour					
FP	BAAQMD	N	0.15 grain/dscf @ 6% O2		N		x	
	6-1-310.3							
FP	SIP 6-	Υ	0.15 grain/dscf @ 6% O2		N	İ	x	
	310.3							
PM ₁₀	BAAQMD	Y	9 lb/hr, for each	BAAQMD	P/A	Source test at		
	condition		turbine/HRSG powertrain	condition		maximum load	x	
	#18310,			#18310, part			^	
	part 20h			31				
PM ₁₀	BAAQMD	Y	0.00452 lb/MM BTU, for	BAAQMD	P/A	Source test at		
	condition		each turbine/HRSG	condition		maximum load	x	
	#18310,		powertrain	#18310, part			^	:
	part 20h			31				
PM ₁₀	BAAQMD	Y	510 lb/day for S-1, S-3 Gas	BAAQMD	P/D	Records,		
	condition		turbines and S-2, S-4	condition		calculations	v	
	#18310,		HRSGs, combined	#18310, part			X	
	part 24d			28				
PM ₁₀	BAAQMD	Y	83.34 ton/yr for S-1, S-3	BAAQMD	P/D	Records,		
	condition		Gas turbines and S-2, S-4	condition		calculations		
	#18310,		HRSGs, combined	#18310, part			x	
	part 25d		(including emissions from	28				1
			commissioning period)	}				

	:			Monitoring	Monitoring		Com	oliance
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Туре		
POC	BAAQMD	Y	2.7 lb/hr (as CH4) for each	BAAQMD	P/A	Source test at		
	condition		turbine/HRSG powertrain	condition		maximum load	×	
	#18310,		except during turbine	#18310, part			^	
	part 20f		startup and shut down	31				
POC	BAAQMD	Υ	0.00126 lb/MM BTU (as	BAAQMD	P/A	Source test at		
	condition		CH4) for each	condition		maximum load		
	#18310,		turbine/HRSG powertrain	#18310, part			X	
	part 20f		except during turbine	31]		
			startup and shut down					
POC	BAAQMD	Υ	48 lb/gas turbine startup	BAAQMD	P/D	Records,		
	condition			condition		calculations		
	#18310,			#18310, part			X	
	part 21			28				
POC	BAAQMD	Y	16 lb/gas turbine shutdown	BAAQMD	P/D	Records,		
	condition			condition	·	calculations		ŀ
	#18310,			#18310, part	,		X	
	part 21			28				
POC	BAAQMD	Υ	96 lb/hr during gas turbine	BAAQMD	P/D	Records,		
	condition	l	cold start up or combustor	condition	,	calculations		
	#18310,		tuning period	#18310, part			X	i.
	part 21			28				
POC	BAAQMD	Y	230.2 lb/day (as CH4) for S-	BAAQMD	P/D	Records,		
	condition		1, S-3 gas turbines and S-2,	condition	, - 	calculations		
	#18310.		S-4 HRSGs, combined	#18310, part			X	
	part 24c			28				
POC	BAAQMD	Y	28 ton/yr) for S-1, S-3 gas	BAAQMD	P/D	Records,		
	condition		turbines and S-2, S-4	condition	.,-	calculations		
	#18310,	:	HRSGs, combined	#18310, part	:		x	
	part 25c		(including emissions from	28				
			commissioning period)					
NH₃	BAAQMD	N	5 ppmv, @ 15% O2 dry,	BAAQMD	С	Ammonia		
•	condition		averaged over 3 hrs for	condition	_	injection rate		
	#18310,		each turbine/HRSG	#18310, part		monitor		
	part 20e		powertrain, except during	27c			X	
	'		turbine startup and			ľ		
			shutdown					
Formal-	BAAQMD	N	3796 lb/yr for S-1, S-3 gas	BAAQMD	P/D	Records,		
dehyde	condition		turbines and S-2, S-4	condition	,,,,	calculations		i
,	#18310,		HRSGs, combined	#18310, part		Conculations	x	
	part 26a		say combined	29				

				Monitoring	Monitoring		Comp	liance
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Type	103	
Formal-	BAAQMD	N	3796 lb/yr for S-1, S-3 gas	BAAQMD	P/every two	Source Test		
dehyde	condition		turbines and S-2, S-4	condition	years on P-1		x	
	#18310,		HRSGs, combined	#18310, part	or P-2		^	
	part 26a			33				
Benzene	BAAQMD	N	480 lb/yr for S-1, S-3 gas	BAAQMD	P/D	Records,		
į	condition		turbines and S-2, S-4	condition		calculations	x	
	#18310,		HRSGs, combined	#18310, part			^	
	part 26b			29				
Benzene	BAAQMD	N	480 lb/yr for S-1, S-3 gas	BAAQMD	P/every two	Source Test		
	condition		turbines and S-2, S-4	condition	years on P-1		.,	
	#18310,		HRSGs, combined	#18310, part	or P-2	1	X	
	part 26b			33				
Specific	BAAQMD	N	22.8 lb/yr for S-1, S-3 gas	BAAQMD	P/D	Records,		
PAH	condition		turbines and S-2, S-4	condition		calculations	.,	
Compounds	#18310,		HRSGs, combined	#18310, part			X	
	part 26c			29				
Specific	BAAQMD	N	22.8 lb/yr for S-1, S-3 gas	BAAQMD	P/every two	Source Test		
PAH	condition		turbines and S-2, S-4	condition	years on P-1			
Compounds	#18310,		HRSGs, combined	#18310, part	or P-2		Χ.	
	part 26c			33				
Heat input	BAAQMD	Υ	2,124 MM BTU/hr (HHV), 3-	BAAQMD	, C	Fuel meter,	•	
limit	condition		hr average for each	condition		firing monitor,		
	#18310,		turbine/HRSG powertrain	#18310, part		calculations	X	
	part 14			27a				
Heat input	BAAQMD	Υ	49,908 MM BTU/calendar	BAAQMD	С	Fuel meter,		
limit	condition		day (HHV), for each	condition		firing monitor,		
	#18310,		turbine/HRSG powertrain	#18310, part		calculations	X	
	part 15			27a				
Heat input	BAAQMD	Υ	35,274,060 MM BTU/yr	BAAQMD	С	Fuel meter,		
limit	condition		(HHV) for S-1, S-3 gas	condition		firing monitor,	_	
	#18310,		turbines and S-2, S-4	#18310, part		calculations	X	
	part 16		HRSGs, combined	27a				ļ
Cold Start-	BAAQMD	Υ	30 firing hours per year for	· BAAQMD	P/E	Recordkeeping		
Up,	condition		S-1 and S-3 gas turbines,	condition		'		
Combustor	#18310,		combined for purposes of	#18310, part			x	
Tuning	part 48		cold start-up or combustor	49				
Firing Limit			tuning					

Table VII - B Applicable Limits and Compliance Monitoring Requirements S-3, HEAT RECOVERY STEAM GENERATOR #1 S-4, HEAT RECOVERY STEAM GENERATOR #2

_				Monitoring	Monitoring		Comp	liance
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Type	res	NO
NOx	BAAQMD	N	9 ppmv @ 15% O2, dry	BAAQMD	c !	CEM		
	9-9-301.1.3			9-9-501			X	
NOx	SIP	Y	9 ppmv @ 15% O2, dry	SIP 9-9-501	С	CEM	x	
	9-9-301.3							
NOx	BAAQMD 9-9-301.2	N	0.15 LB/MMBTU or 5 ppmv	BAAQMD 9-9-501	С	CEM	x	
NOx	NSPS, 40	Υ	0.2 lb/ MM BTU except,	NSPS 40 CFR	С	CEM		
	CFR 60.44b		during start-up, shutdown or	60.48b (b)(2) and		•		•
	(a)(4)(i)		malfuntion	BAAQMD			x	:
				Condition				
				#18310, part 27b				
NOx	NSPS, 40	Υ	75 ppmv @ 15% O2, dry, 4-	NSPS 40 CFR	С	CEM		_
	CFR 60.332		hour rolling average	60.334(c.) and				
	(a)(1)			BAAQMD			x	
		ļ		Condition				
				#18310, part 27b				
NOx	1	Υ	None	40 CFR 75.10	С	CEM	х	
NOx	BAAQMD	Υ	19.2 lb/hr for each	BAAQMD	С	СЕМ		
	condition		turbine/HRSG powertrain,	condition	i i			
	#18310,		except during turbine	#18310, Part 27b			X	
	part 20a		startup and shutdown		ļ			
NOx	BAAQMD	Υ	19.2 lb/hr for each	BAAQMD	P/A	Source Test		
	condition		turbine/HRSG powertrain,	condition		at maximum		
	#18310,		except during turbine	#18310, Part 31		load	X	
	part 20a		startup and shutdown]			
NOx	BAAQMD	Υ	0.00904 lb/MM BTU for	BAAQMD	С	CEM		
	condition		each turbine/HRSG	condition				
	#18310,		powertrain, except during	#18310, Part 27b			x	
	part 20a		turbine startup and					
	1		shutdown		!			

T	Cts - st -			Monitoring	Monitoring		Comp	liance
Type of Limit	Citation of Limit	FE Y/N	Limit	Requirement Citation	Frequency (P/C/N)	Monitoring Type	Yes	No
NOx	BAAQMD	Υ	0.00904 lb/MM BTU for	BAAQMD	P/A	Source Test		
	condition	<u> </u>	each turbine/HRSG	condition		at maximum		
	#18310,		powertrain, except during	#18310, Part 31		load	x	
	part 20a		turbine startup and					
			shutdown					
NOx	BAAQMD	Y	2.5 ppmv, @ 15% O2, dry,	BAAQMD	P/A	Source Test		
	condition		for each tubine/HRSG	condition		at maximum		
	#18310,		powertrain, 1-hr average	#18310, Part 31		load	x	-
	part 20b		except during turbine		j			
			startup and shutdown					
NOx	BAAQMD	Y	2.5 ppmv, @ 15% O2, dry,	BAAQMD	С	СЕМ		
	condition		for each tubine/HRSG	condition				
	#18310,		powertrain, 1-hr average	#18310, Part 27b			x	
	part 20b		except during turbine					
			startup and shutdown					
NOx	BAAQMD	Υ	1362.6 lb/day for S-1, S-3	BAAQMD	С	CEM		
	condition		Gas Turbines and S-2, S-4	condition				
	#18310,		HRSGs, combined	#18310, Part 27b			Х	
	part 24a							
NOx	BAAQMD	Y	123.4 ton/yr for S-1, S-3 Gas	BAAQMD	С	CEM		
	condition		Turbines and S-2, S-4 HRSGs,	condition				
	#18310,		combined (including	#18310, Part 27b			x	
	part 25a		emissions from					
	ļ		commissioning period)					
co	BAAQMD	Y	18.7 lb/hr, for each	BAAQMD	P/A	Source Test		
	condition		turbine/HRSG powertrain,	condition		at maximum		
	#18310,		except during turbine	#18310, Part 31		load and	X	
	part 20c		startup and shutdown			minimum		
	1					load		
co	BAAQMD	Y	18.7 lb/hr, for each	BAAQMD	С	СЕМ		
	condition		turbine/HRSG powertrain,	condition				
	#18310,		except during turbine	#18310, Part 27b			X	
	part 20c		startup and shutdown					
со	BAAQMD	Υ	0.0088 lb/MM BTU for each	BAAQMD	P/A	Source Test		
	condition		turbine/HRSG powertrain,	condition		at maximum		
	#18310,	ļ	except during turbine	#18310, Part 31		load and	x	
	part 20d]	startup and shutdown			minimum		
				ľ		load		

_				Monitoring	Monitoring		Comp	liance
Type of	Citation of	FE	4 t ta	Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N Y	Limit	Citation	(P/C/N)	Туре		
со	BAAQMD	'	0.0088 lb/MM BTU for each	BAAQMD	ر	CEM		
	condition		turbine/HRSG powertrain,	condition				
	#18310,	ļ	except during turbine	#18310, Part 27b			х	
	part 20d		startup and shutdown					
со	BAAQMD	Υ	4 ppmv @ 15% O2, dry, for	BAAQMD	P/A	Source Test		
	condition		each turbine/HRSG	condition		at maximum		
	#18310,		powertrain, 3-hr average,	#18310, Part 31		load and	X	
	part 20d		except during turbine			minimum		
.		_	startup and shutdown			load		
CO	BAAQMD	Y	4 ppmv @ 15% O2, dry, for	BAAQMD	С	CEM		
	condition		each turbine/HRSG	condition				
	#18310,		powertrain, 3-hr average,	#18310, Part 27b			X	
	part 20d		except during turbine					
		ļ	startup and shutdown					
CO	BAAQMD	Y	7,891.1 lb/day for S-1, S-3	BAAQMD	С	CEM		
	condition		gas turbines and S-2, S-4	condition			x	
	#18310,		HRSGs, combined	#18310, Part 27b			••	
	part 24b							
CO	BAAQMD	Y	588 ton/yr for S-1, S-3 gas	BAAQMD	С	CEM		
	condition		turbines and S-2, S-4 HRSGs,	condition				
	#18310,		combined (includes	#18310, Part 27b	•		X	
	part 25b		emissions from					
		ļ	commissioning period)					
CO2		Y	None	40 CFR 75.10	С	fuel flow		
						monitor and	x	
						CO2		
	ļ	ļ				calculation		
SO₂	BAAQMD	Y	GLC ¹ of 0.5 ppm for 3 min or		N			
	9-1-301		0.25 ppm for 60 min or 0.05				X	
	-		ppm for 24 hours			ļ		
SO₂	BAAQMD	Υ	300 ppm (dry)		N		x	
	9-1-302							
SO ₂	NSPS	Υ	0.015% (vol.)	NSPS 40 CFR	N			
	40 CFR		@ 15% O₂ (dry)	60.334(h)			x	
	60.333(a)	<u> </u>						

_				Monitoring	Monitoring		Comp	liance
Type of	Citation of	FE	3770	Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N Y	Limit	Citation	(P/C/N)	Туре		
SO₂	NSPS		Total sulfur content of fuel	NSPS 40 CFR	P/M	Fuel sulfur		
	40 CFR		not to exceed 0.8 percent by	60.334(h)(3)(ii)		content		
	60.333(b)	'	weight (8000 ppmw)	and BAAQMD		testing	X	
				condition				
	<u> </u>			#18310, Part 45	-1.		· · · · · · · · · · · · · · · · · · ·	
SO ₂		Y	None	40 CFR 75.11, 40	P/A	Fuel		
				CFR 75, Appendix		measureme	X	
				D, part 2.3		nts,		
		.,	4.00 !! /!		- 12	calculations		
SO2	BAAQMD	Y	1.28 lb/hr, for each	BAAQMD	P/A	Source test		
	condition		turbine/HRSH powertrain	condition		at maximum	X	
	#18310,			#18310, part 31		load		
503	part 20g	,,	1 20 lb /b f b		0/0	D		
SO2	BAAQMD	Y	1.28 lb/hr, for each	BAAQMD	P/D	Records,		
	condition		turbine/HRSH powertrain	condition		calculations	x	
	#18310,			#18310, part 28				
	part 20g	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	O OCCUP IS AN A DTU Former of	DA 4 CA 4 D	5/4	5 1.1		
SO2	BAAQMD condition	Y	0.0006lb/MM BTU, for each	BAAQMD	P/A	Source test		
			turbine/HRSG powertrain	condition		at maximum	x	
	#18310,			#18310, part 31		load		
500	part 20g	<u> </u>	0.000511 /2 44 5711 5		2.5			
SO2	BAAQMD	Y	0.0006lb/MM BTU, for each	BAAQMD	P/D	Records,		
	condition		turbine/HRSG powertrain	condition		calculations	x	
	#18310,			#18310, part 28				
	part 20g		5701141 6 1					
SO2	BAAQMD	Y	57.9 lb/day for each	BAAQMD	P/D	Records,		
	condition		turbine/HRSG powertrain	condition		calculations	X	
	#18310,			#18310, part 28				
	part 24e		10.5 *** (f ** * * * * * * *		0/0			
SO2	BAAQMD	Y	10.6 ton /yr for each	BAAQMD	P/D	Records,		
	condition #18310,		turbine/HRSG powertrain (includes emissions from	condition		calculations	x	
	part 25e		commissioning period)	#18310, part 28				
Opacity	i	N			. Al			
Opacity	6-1-301	'*	> Ringelmann No. 1 for no more than 3 minutes in any		N		v	
	0-1-201		hour				X	
Onacity	CID C 201	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						
Opacity	SIP 6-301	Y	> Ringelmann No. 1 for no		N		v	
	1		more than 3 minutes in any				X	
·	JI	l	hour		L			

				Monitoring	Monitoring		Comp	liance
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Туре		
FP	6-1-310.3	N	0.15 grain/dscf @ 6% O2		N		X	
FP	SIP 6-310.3	Y	0.15 grain/dscf @ 6% O2		N		х	
PM	NSPS 40 CFR 60.42a	Υ	< 20% opacity, 6 minute average, except one six		N			
	(b)		minute period/hr up to 27% opacity			:	X	
PM ₁₀	BAAQMD condition #18310, part 20h	Y	9 lb/hr, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	х .	
PM ₁₀	BAAQMD condition #18310, part 20h	Υ	0.00452 lb/MM BTU, for each turbine/HRSG powertrain	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	x	
PM ₁₀	BAAQMD condition #18310, part 24d	Υ	510 lb/day for S-1, S-3 Gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 24	P/D	Records, calculations	x	
PM ₁₀	BAAQMD condition #18310, part 25d	Y	83.34 ton/yr for S-1, S-3 Gas turbines and S-2, S-4 HRSGs, combined (including emissions from commissioning period)	BAAQMD condition #18310, part 25	P/D	Records, calculations	x	
POC	BAAQMD condition #18310, part 20f	Υ	2.7 lb/hr (as CH4) for each turbine/HRSG powertrain except during turbine startup and shut down	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	x	
POC	BAAQMD condition #18310, part 20f	Y	0.00126 lb/MM BTU (as CH4) for each turbine/HRSG powertrain except during turbine startup and shut down	BAAQMD condition #18310, part 31	P/A	Source test at maximum load	x	
POC	BAAQMD condition #18310, part 24c	Y	230.2 lb/day (as CH4) for S- 1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 28	P/D	Records, calculations	x	

		FE		_	Monitoring		Compliance	
Type of	Citation of			Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Туре	163	110
POC	BAAQMD	Y	28 ton/yr) for S-1, S-3 gas	BAAQMD	P/D	Records,		
	condition		turbines and S-2, S-4 HRSGs,	condition		calculations		
	#18310,		combined (including	#18310, part 28			Х	
	part 25c		emissions from	1				
		ļ	commissioning period)					
NH₃	BAAQMD	N	5 ppmv, @ 15% O2 dry,	BAAQMD	С	Ammonia		
	condition		averaged over 3 hrs for each	condition		injection		
	#18310,		turbine/HRSG powertrain,	#18310, part 27c		rate monitor	X	
	part 20e		except during turbine				i	
			startup and shutdown					
Formalde-	BAAQMD	N	3796 lb/yr for S-1, S-3 gas	BAAQMD	P/D	Records,		
hyde	condition	1	turbines and S-2, S-4 HRSGs,	condition		calculations		
	#18310,		combined	#18310, part 29			x	
	part 26a							
]			
Formalde-	BAAQMD	N	3796 lb/yr for S-1, S-3 gas	BAAQMD	P/every	Source Test	-	
hyde	condition		turbines and S-2, S-4 HRSGs,	condition	two years			
•	#18310,		combined	#18310, part 33	on P-1 or		X	
	part 26a				P-2			
Benzene	BAAQMD	N	480 lb/yr for S-1, S-3 gas	BAAQMD	P/D	Records,		
	condition		turbines and S-2, S-4 HRSGs,	condition		calculations		
	#18310,		combined	#18310, part 29			X	
	part 26b			, ,				
Benzene	BAAQMD	N	480 lb/yr for S-1, S-3 gas	BAAQMD	P/every	Source Test		
	condition		turbines and S-2, S-4 HRSGs,	condition	two years			
	#18310,		combined	#18310, part 33	on P-1 or		X	
	part 26b				P-2			
Specific PAH		N	22.8 lb/yr for S-1, S-3 gas	BAAQMD	P/D	Records,		
Compounds	condition		turbines and S-2, S-4 HRSGs,	condition	',	calculations		
-	#18310,	1	combined	#18310, part 29]		X	
	part 26c							
Specific PAH	BAAQMD	N	22.8 lb/yr for S-1, S-3 gas	BAAQMD	P/every	Source Test		
Compounds	condition	''	turbines and S-2, S-4 HRSGs,	condition	two years	300.00 1030		
Compounds	#18310,		combined	#18310, part 33	on P-1 or		X	
	part 26c		comonica .	10010, part 33	P-2			
Heat input	BAAQMD	Y	2,124 MM BTU/hr (HHV), 3-	BAAQMD	C C	Fuel meter,		
limit	condition	'	hr average for each	condition				
mint	#18310,		turbine/HRSG powertrain	#18310, part 27a		firing monitor,	x	
	1		turbine/rinso powertrain	#16310, part 2/a	1	•		
	part 14	<u> </u>	<u> </u>	<u> </u>	1	calculations		

There are	C'A AAI A A A			Monitoring	Monitoring		Compliance	
Type of Limit	Citation of Limit	FE Y/N	Limit	Requirement Citation	Frequency (P/C/N)	Monitoring Type	Yes	No
Heat input limit	BAAQMD condition #18310,	Y	49,908 MM BTU/calendar day (HHV), for each turbine/HRSG powertrain	BAAQMD condition #18310, part 27a	С	Fuel meter, firing monitor,	x	
Heat input limit	part 15 BAAQMD condition #18310, part 16	Y	35,274,060 MM BTU/yr (HHV) for S-1, S-3 gas turbines and S-2, S-4 HRSGs, combined	BAAQMD condition #18310, part 27a	С	Fuel meter, firing monitor, calculations	х	
Prohibited firing	BAAQMD condition #18310, part 17	Y	Each HRSG duct burner may not be fired unless its associated gas turbine is being fired	BAAQMD condition #18310, part 27a	С	Fuel meter, firing monitor, calculations	x	

Table VII – C Applicable Limits and Compliance Monitoring Requirements S-5 COOLING TOWER

Time of	Citation of	FE		Monitoring	Monitoring		Compliance	
Type of Limit	Limit	Y/N	Limit	Requirement Citation	Frequency (P/C/N)	Monitoring Type	Yes	No
Opacity	BAAQMD 6-1-301	N	>Ringelmann No.1 for no more than 3 minutes in any hour		N		x	
FP	BAAQMD 6-1-310	N	0.15 gr/dscf		N		х	-
Opacity	SIP 6-301	Y	>Ringelmann No.1 for no more than 3 minutes in any hour		N		x	
FP	SIP 6-310	Y	0.15 gr/dscf		N		х	
Drift Rate	BAAQMD Condition #18310, part 46	Y	. 0.0005%	BAAQMD Condition #18310, part 46	P	Initial Source Test	x	
Total Dissolved Soilds	BAAQMD Condition #18310, part 46	Υ	5438 ppmw (mg/l)	BAAQMD Condition #18310, part 46	P/D	Sampling and Testing of cooling tower water	x	

Table VII – D Applicable Limits and Compliance Monitoring Requirements S-6 STATIONARY STANDBY GENERATOR SET

				Monitoring	Monitoring		Comp	oliance
Type of	Citation of	FE		Requirement	Frequency	Monitoring	Yes	No
Limit	Limit	Y/N	Limit	Citation	(P/C/N)	Туре		
Opacity	BAAQMD	N	>Ringelmann No.1 for		N			
	6-1-301		no more than 3					
			minutes in any hour					
Opacity	SIP	Y	>Ringelmann No.1 for		N			
	6-301		no more than 3					
			minutes in any hour				•	
FP	BAAQMD	N	0.15 gr/dscf @ 6% O2		N			
	6-1-310.3							
FP	SIP	Υ	0.15 gr/dscf @ 6% O2		N			
	6-310.3							
SO₂	BAAQMD	Υ	GLC ¹ of 0.5 ppm for 3		N			
	9-1-301		min or 0.25 ppm for					
			60 min or 0.05 ppm	}				
			for 24 hours					CE NOT
SO₂	BAAQMD	Y	300 ppm (dry)		N		СОММІ	SSIONED
	9-1-302							
Heat	BAAQMD	Y	14.1 MM BTU/hr		N			
Input	Condition							
Limit	#22231							
	part 1	<u> </u>						
Reliability	BAAQMD	Υ	100 hours per	BAAQMD	P/E	Recordkeeping		
Related	Condition #22231		calendar year	Condition				
activities	#22231 part 2			#22231 part 6				
	p 2							
NOx, CO	BAAQMD	Υ	1.0 g NOx/bhp-hr		N			
and POC	Condition		2.75 g CO/bhp-hr					
	#22231		1.0 g POC/bhp-hr		/			
	part 3	<u> </u>						

Table VII – E Applicable Limits and Compliance Monitoring Requirements S-7 FIRE PUMP DIESEL ENGINE

Time of	Type of Citation of		-	1	Monitoring		Compliance	
Type of Limit	Limit	FE Y/N	Limit	Requirement Citation	Frequency (P/C/N)	Monitoring Type	Yes	No
Opacity	BAAQMD 6-1-301	N	>Ringelmann No.2 for no more than 3 minutes in any hour		N N		х	
Opacity	SIP 6-301	Y	>Ringelmann No.2 for no more than 3 minutes in any hour		N		x	
FP	BAAQMD 6-1-310.3	N	0.15 gr/dscf @ 6% O2		N		X,	
FP	SIP 6-310.3	Υ	0.15 gr/dscf @ 6% O2		N		х	
SO ₂	BAAQMD 9-1-301	Y	GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		x	
Fuel Sulfur Content	BAAQMD 9-1-304	Y	Sulfur Content ≤ 0.5% by weight		N		х	
ŞO₂	BAAQMD Condition #19610, part 39	N	Sulfur content of fuel less than 0.05% by weight	BAAQMD Condition #19610, part 39	P/E		x	
Reliability Related activities	BAAQMD Condition #21917 part 1	Y	30 hours per calendar year	BAAQMD Condition #21917 part 2, 3	P/E	Totalizing Meter, record keeping	x	